

Colorado Department of Transportation
Structure Inspection and Inventory Report (English Units)

Highway Number (ON) 5D: 470A

Mile Post (ON)11: 12.447 mi

Bridge Name: F-16-MD Inspection Date: 3/6/2012 Sufficiency Rating: 98.6 Not Eligible

NBI Reporting ID:	F-16-MD	Hist Signif 37:	5	UW Inspection Date 93B:	
Rgn/Sectn 2E/2M:	68	Posting status 41:	A	SI Date 93C:	
Trans Region 2T:	02	Service on/un 42A/B:	6 1	Bridge Cost 94:	\$ 0
County Code 3:	059	Main Mat/Desgn 43A/B:	6 2	Roadway Cost 95:	\$ 0
JEFFERSON		Appr Mat/Desgn 44A/B:	0 0	Total Cost 96:	\$ 0
Place Code 4:	00000	Main Spans Unit 45:	2	Year of Cost Estimate 97:	
non-city		Approach Spans 46:	0	Brdr Brdg Code/% 98A/B:	
Rte.(On/Under)5A:	1	Horiz Clr 47:	38.0 ft	Border Bridge Number 99:	
Signing Prefix 5B:	3	Max Span 48:	101.6 ft	Defense Highway 100:	0
Level of Service 5C:	1	Str Length 49:	200.1 ft	Parallel Structure 101:	L
Directional Suffix 5E:	0	Curb Wdth L/R 50A/B:	0.0 ft 0.0 ft	Direction of Traffic 102:	1
Feature Intersected 6:		Width Curb to Curb 51:	38.0 ft	Temporary Structure 103:	
KIPLING PARKWAY		Width Out to Out 52:	41.5 ft	Highway System 104:	1
Facility Carried 7:		Deck Area:	8,299. sq. ft	Fed Lands Hiway 105:	0
SH 470 ML WBND		Min Clr Ovr Brdg 53:	99.99	Year Reconstructed 106:	0000
Alias Str No.8A:		Min Undrclr Ref 54A:	H	Deck Type 107:	1
		Min Undrclr 54B:	18.4 ft	Wearing Surface 108A:	6
Prll Str No. 8P		Min Lat Clrnce Ref R 55A:	H	Membrane 108B:	2
F-16-MC		Min Lat Undrclr R 55B:	11.0 ft	Deck Protection 108C:	1
Location 9:		Min Lat Undrclr L 56:	6.0 ft	Truck ADT 109:	6 %
12.4 MI S OF I 70		Deck 58:	7	Trk Net 110:	1
Max Clr 10:	328.1 ft	Super 59:	8	Pier Protection 111:	#
BaseHiway Net12:	1	Sub 60:	8	NBIS Length 112:	Y
IrsinvRout 13A:	000000470A	Channel/Protection 61:	N	Scour Critical 113:	N
IrrsubRout No13B:	00	Culvert 62:	N	Scour Watch 113M:	
Latitude 16:	39d 33' 37"	Optng Rtg Method 63:	1 LF Load Fact	Future ADT 114:	39,397
Longitude 17:	105d 06' 37"	Operating Rating 64:	71.0	Year of Future ADT 115:	2027
Range18A:	69 W	Inv Rtg Method 65:	1	CDOT Str Type 120A:	CPGC
Township18B:	69	Inventory Rating 66:	35.1	CDOT Constr Type 120B:	31
Section18C:	3	Asph/Fill Thick 66T:	003 "in"	Inspection Indic 122A:	
Detour Length 19:	0.6 mi	Str. Evaluation 67:	7	Inspection Trip 122AA:	
Toll Facility 20:	3	Deck Geometry 68:	6	Inspection Schedule ID:	EVN DEC H13
Custodian 21:	1	Undrclr Vert/Hor 69:	7	Maintenance Patrol 123:	17
Owner 22:	1	Posting 70:	5	Expansion Dev/Type124:	O
Functional Class 26:	12	Waterway Adequacy 71:	N	Brdg Rail Type/Mod 125A/B:	R 0
Year Built 27:	1986	Approach Alignment 72:	8	Posting Trucks 129A/B/C:	0 0 0
Lanes on 28A:	2	Type of Work 75A:		Str Rating Date 130:	2/3/1997
Lanes Under 28B:	7	Work Done By 75B:		Special Equip 133:	-1
ADT 29:	25,750	Length of Improvment 76:	0.0 ft	Vert Clr N/E 134A/B/C:	X 99.99 0
Year of ADT 30:	2007	Insp Team Indicator 90B:	GREEN TEAM	Vert Clr S/W 135A/B/C:	X 99.99 0
Design Load 31:	6	Inspector Name 90C:	ROSSARTB	Vertical Clr Date:	1/20/2010
Apr Rdwy Width 32:	38.0 ft	Frequency 91:	24 months	Weight Limit Color: 139:	0
Median 33:	1	FC Frequency 92A:		Str Billing Type:	U
Skew 34:	0.00 °	UW Frequency 92B:		Userkey 1 - System:	ONSYS
Structure Flared 35:	0	SI Frequency 92C:		Userkey 7-Update Indic:	
Sfty Rail 36a/b/c/d:	1 1 1 1	FC Inspection Date 93A:			
Rail ht36h:	36 "in"				

Inspector Name: ROSSARTB

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Element Inspection Report

Elm/Env	Description	Units	Total Qty	% in 1	CS 1	% in 2	CS 2	% in 3	CS 3	% in 4	CS 4	% in 5	CS 5
26/4	Conc Deck/Coatd Bars	(SF)	8,303	100 %	8,303	0 %	0	0 %	0	0 %	0	0 %	0
109/4	P/S Conc Open Girder	(LF)	1,188	100 %	1,188	0 %	0	0 %	0	0 %	0	0 %	0
210/4	R/Conc Pier Wall	(LF)	21	100 %	21	0 %	0	0 %	0	0 %	0	0 %	0
215/4	R/Conc Abutment	(LF)	83	100 %	83	0 %	0	0 %	0	0 %	0	0 %	0
234/4	R/Conc Cap	(LF)	41	100 %	41	0 %	0	0 %	0	0 %	0	0 %	0
321/4	R/Conc Approach Slab	(EA)	2	50 %	1	50 %	1	0 %	0	0 %	0	0 %	0
325/4	Slope Prot/Berms	(EA)	2	50 %	1	50 %	1	0 %	0	0 %	0	0 %	0
326/1	Bridge Wingwalls	(EA)	4	100 %	4	0 %	0	0 %	0	0 %	0	0 %	0
331/4	Conc Bridge Railing	(LF)	400	88 %	350	13 %	50	0 %	0	0 %	0	0 %	0
340/4	Superstr Cnc Coating	(EA)	1	100 %	1	0 %	0	0 %	0	0 %	0	0 %	0
341/4	Substr Conc Coating	(EA)	1	100 %	1	0 %	0	0 %	0	0 %	0	0 %	0
359/4	Soffit Smart Flag	(EA)	1	0 %	0	100 %	1	0 %	0	0 %	0	0 %	0

Elem/Env	Description	Element Notes
26/4	Conc Deck/Coatd Bars	3 inches Asphalt. The longitudinal seams are starting to ravel; 20 feet in length on centerline near P2, and 10 feet along the Left shoulder stripe have been patched. See 2012 PHOTO.
109/4	P/S Conc Open Girder	Colorado G54 girders. Good condition.
210/4	R/Conc Pier Wall	Good condition.
215/4	R/Conc Abutment	Shallow delam at the corners of girders 1C @ A1, 2C & 2D @ A3. Girders are embedded into the abutment. A few hairline vertical cracks in both.
234/4	R/Conc Cap	Good condition. Girders 2C bay B & 2D bay D, have light vertical crack with efflor. Girders are embedded.
321/4	R/Conc Approach Slab	Asphalt cracked at both at ends, opening and breaking up at the joints, worse at A1 w/ potholes and major cracks has not been patched, while A3 was repaired. See 2010 & 2012PHOTOS.
325/4	Slope Prot/Berms	Slope paving is settled 2 inches along the Abutment 1 breast wall, and settled 4 inches with 2 inches of separation along the A1Left Wingwall. Settled 2.75 inches along the A1Right Wingwall. Separated 1 inch along the A3 Left Wingwall, and settled up to 5 inches along the A3 Right Wingwall. Typical horizontal cracks in both, all panels.
326/1	Bridge Wingwalls	Wings have vertical and diagonal cracks. #1 Left, and #3 Left have horizontal cracking at the cold joints.
331/4	Conc Bridge Railing	Many light, to moderate vertical cracks in both Jersey barriers with efflor are typical. Several shallow chips at joints, along the tops, and edges.

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Elem/Env	Description	Element Notes
340/4	Superstr Cnc Coating	On girders and bridge rail. Many scrape on the rail.
341/4	Substr Conc Coating	On abutments, wingwalls, pier wall, pier cap, and slope paving. Peeling on the slope paving.
359/4	Soffit Smart Flag	Transverse cracks with light efflor, throughout. See 2012 SKETCH.

Maintenance Activity Summary

MMS Activity	Description	Recommended	Status	Target Year	Est Cost
**	Replace	12/5/2007	-1	2014	500

Seal the cracks at the approach slabs.

Bridge Notes

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Time: 10:00	Temp: 61 Degrees F.	Weather: Hazy/Wind
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☒ NBI: ☒ Element: ☐ Underwater: ☐ Fracture Critical: ☐ Other: Type: Regular NBI

- ☐ FCM's
- ☐ Posting Signs
- ☐ Essential Repair Verification
- ☐ Vertical Clearance
- ☐ Stream Bed Profile

Inspector (Team Leader)